ICCIDD

Partnership for Tracking
Country Progress Towards
Achieving the Goal of

IODINE DEFICIENCY DISORDERS
(IDD)

PREVENTION, CONTROL, and ELIMINATION

by and beyond the year 2000

The International Council for Control of Iodine Deficiency Disorders (ICCIDD) is a non-profit nongovernmental organization dedicated to the sustainable elimination of iodine deficiency disorders (IDD) throughout the world. The ICCIDD was granted an official status as an International NGO at the 47th World Health Assembly held in Geneva in 1994. It's activities are supported by donations/ grants from the Australian Agency for International Development (AusAID), the Canadian International Development Agency (CIDA), the Micronutrient Initiative (MI), the Netherlands Ministry for Development Cooperation, the Swedish International Development Agency (SIDA), the United Nations Children's Fund (UNICEF), the United States Agency for International Development (USAID), the World Bank, the World Health Organization (WHO), and others.

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TO THE GLOBAL PARTNERSHIP
DEDICATED TO THE ELIMINATION OF
IODINE DEFICIENCY DISORDERS

An Ancient Scourge of Mankind

The People of the affected countries
The Governments of the affected countries

The Salt Producers of each country

The International Agencies-especially
The World Health Organization
The United Nations Children's Fund
The World Bank

The Micronutrient Initiative
Program Against Micronutrient Malnutrition

Kiwanis International

The International Expert Network of
International Council for Control of
Iodine Deficiency Disorders
(ICCIDD)

The Bilateral Agencies especially
The Australian Agency for International Development
The Canadian International Development Agency
The Netherlands Ministry for Development Cooperation
The Swedish International Development Agency
The United States Agency for International Development

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Preface

The International Council for Control of Iodine Deficiency Disorders (ICCIDD) was founded in 1985 with the objective of assisting countries in the establishment of effective programmes for the elimination of IDD - iodine deficiency which is now recognised as the most common cause of preventable brain damage.

The ICCIDD is an international network of some 400 professionals from 80 countries with a majority from developing countries. It is a non governmental organisation supported by a number of agencies (MI, UNICEF, WHO, World Bank) and governments (Australia, Canada, Holland and Sweden).

In May 1996 the world Health Assembly (WHA) passed a Resolution commending the need for monitoring and independent evaluation in order to ensure sustainability. The Resolution indicated the availability of the ICCIDD to assist national governments on request as required.

A further comprehensive assessment and report has been requested for the World Health Assembly in 1999.

This booklet describes the way in which countries and agencies may request assistance from the ICCIDD in providing monitoring and independent evaluation of their programmes, to ensure sustainability, so that brain damage due to iodine deficiency will be eliminated by and beyond the year 2000.

In this way another great triumph will be achieved following the eradication of smallpox in 1980 and the imminent elimination of polio.

ICCIDD is recognised by WHO as the expert international body on Iodine Deficiency Disorders. It is a comprehensive consultancy resource, ready to provide services to countries and agencies, including and especially for evaluation and monitoring. The methodology has been carefully developed and the manpower is available within ICCIDD, which has already been involved, at the request and in collaboration with governments and UN agencies, in programmes of independent evaluation in 25 countries in Africa, Asia, Europe and South America.

The ICCIDD mandate is to promote collaboration with stakeholders in the spirit of true partnership to end the hidden hunger of iodine deficiency.

The ICCIDD assures all concerned of its commitment to work with them in the achievement of the great goal of elimination of the ancient scourge of iodine deficiency.

Basil S Hetzel
Chairman, ICCIDD

August 1996

François Delange
Executive Director, ICCIDD

Background

Iodine Deficiency arising from a deficiency in the soil is recognised by the World Health Organization as the most common preventable cause of brain damage in the world today. The effects of iodine deficiency on the growth and development of a population have been called the iodine deficiency disorders (IDD). Brain damage, arising from the effects of iodine deficiency can be totally prevented by correction of the iodine deficiency before pregnancy.

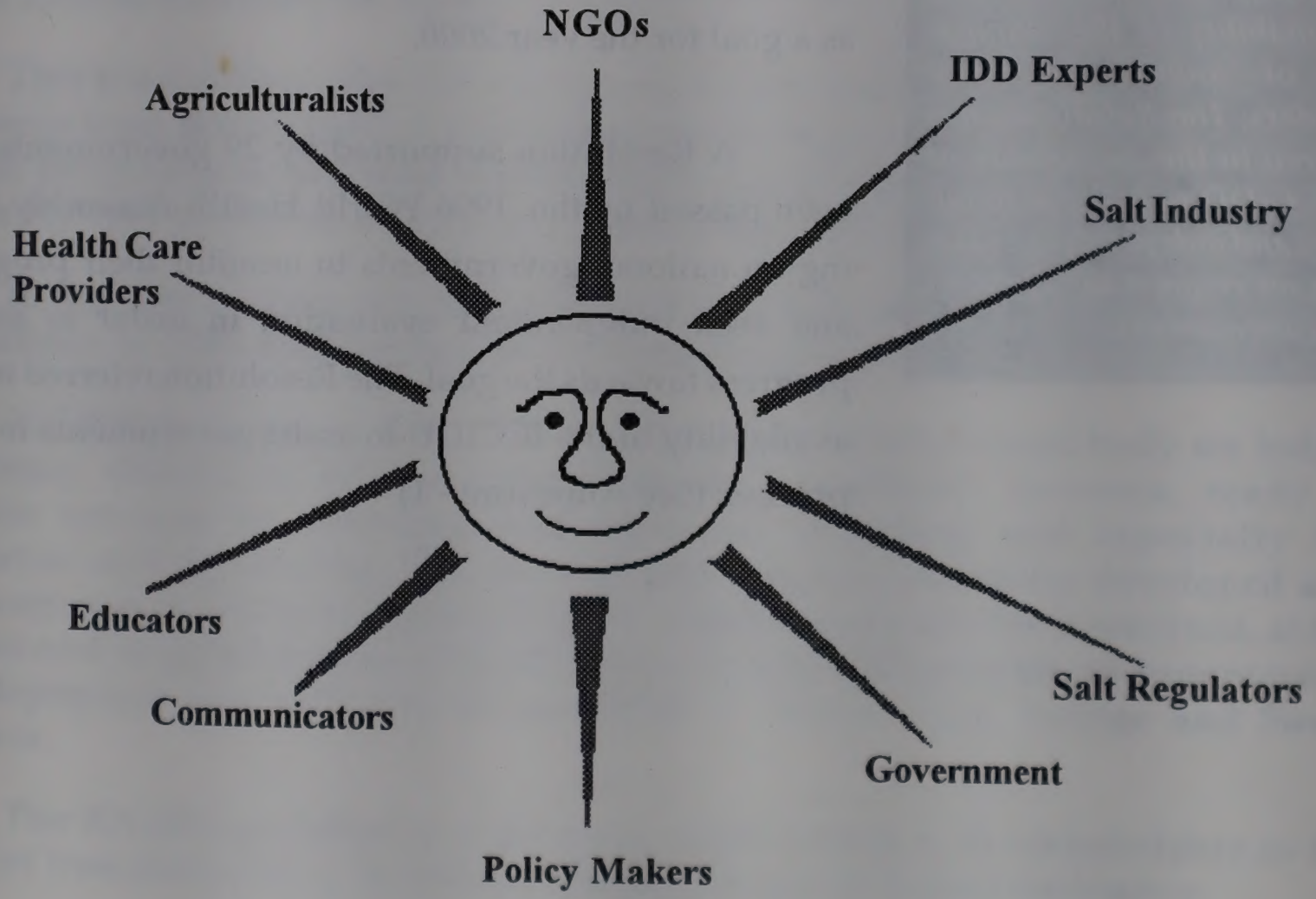
In 1990 The World Summit for Children and the World Health Assembly accepted the elimination of IDD as a goal for the year 2000.

A Resolution supported by 29 governments has been passed by the 1996 World Health Assembly calling on national governments to monitor their progress and seek independent evaluation in order to assess progress towards the goal. The Resolution referred to the availability of the ICCIDD to assist governments in this process. (See Annexure - 1)

A Resolution has been passed by the 49th World Health Assembly (May, 1996) regarding monitoring and sustainability of the elimination of iodine deficiency disorders. The Resolution has referred to the availability of the ICCIDD to assist in monitoring and independent evaluation on request by agencies and governments.

Objective

This document proposes a procedure for an independent assessment by ICCIDD of current progress towards elimination of IDD in a given country, at the request of that country. The procedure to be followed will need to be adapted to the specific characteristics and needs of each country.



Sustaining Elimination of IDD

Process

The Request may be addressed to the ICCIDD, WHO or UNICEF, at any level – country, regional or global. It should be an official request from governments, usually the Ministry of Health (MOH). The request may also be assisted by any of the three organizations. All the requests would be shared between ICCIDD, WHO, UNICEF so that a suitable joint response can be planned.

The Reply would be from the particular agency addressed. A list of ICCIDD Office Bearers is enclosed as Annexure - 2. In the case of WHO or UNICEF country or regional offices should be consulted.

The Reply would be from the particular agency addressed. A list of ICCIDD Office Bearers is enclosed as Annexure - 2. In the case of WHO or UNICEF, country or regional offices should be consulted.

A general recommended approach is described in the section, "Plan for the assessment". This approach may be appropriately modified to suit the country concerned. The procedure should be developed in close collaboration with the government and the country representative (WHO/ UNICEF) so as to meet the requirements of that country.

Funding: Potential funding sources include primarily the WHO and UNICEF country or regional offices, or the UNDP country office. Additional sources include the programmes of evaluation of ICCIDD, and of other collaborating institutions such as the Micronutrient Initiative (MI), Program Against Micronutrient Malnutrition (PAMM), or bilateral or non-governmental organizations.

ICCIDD experts: The composition of the external consultants team will vary from one country to another. It might reasonably include a combination of experts in public health, endocrinology, laboratory medicine, salt industry and technology, management, health economics and communication. ICCIDD has drawn up a list of potential consultants highly specialized in various disciplines.

Visiting Teams will comprise ICCIDD experts or those identified, in consultation by WHO/UNICEF, including possibly the regional or sub-regional coordinator of ICCIDD. The national authorities' agreement on the constitution of the team will be obtained through the formal channels of the government. This will support the team's work actively, in terms of allowing access to key areas, providing transport and lodging facilities within the country, including laboratory services.

Visiting Teams will be made up of ICCIDD experts identified, in consultation with WHO/UNICEF; including the regional or sub-regional coordinator of ICCIDD.

Plan for the assessment

Final objective: To monitor the progress made towards elimination of IDD as a public health problem using WHO/UNICEF/ICCIDD criteria as given in Table - 1.

Table - 1. Criteria for monitoring progress towards eliminating IDD as a public health problem as per the document "Indicators for assessing Iodine Deficiency Disorders and their control through salt iodization" WHO/NUT/94.6, 1994.

Indicator	Goal
1. **Salt iodization** Proportion of households consuming effectively iodized salt	>90%
2. **Urinary iodine** Proportion below 100µg/l Proportion below 50µg/l	<50% <20%
3. **Thyroid size** In school children 6-12 years of age: Proportion with enlarged thyroid, by palpation or ultrasound*	<5%
4. **Neonatal TSH** Proportion with levels >5mU/l whole blood	<3%

* Thyroid volume estimated by ultrasonography above the 97th percentile (P97) for age in iodine replete areas (Criteria for P97 are now established by ICCIDD and WHO).

***WHO/UNICEF/ICCIDD** have recommended criteria for monitoring progress towards eliminating IDD as a public health problem*

Please note that for certifying "elimination of IDD" in a country, it is not necessary that all the above criteria be fulfilled. The salt iodization criterion should be satisfied, if this is the main method of prevention. In addition, at least two of the remaining criteria should be fulfilled.

Preparation of the visit: Before visiting the country, the survey team should be informed as much as possible about the status of IDD in the country, before and after the implementation of the IDD elimination programme. Information may be available in the published literature, from unpublished data available from national groups, internal reports of MOH, UNICEF, WHO and ICCIDD Databases. A detailed report on the progress of the programme for IDD elimination in the country should be available, including methodology, intermediate and final results. Intercalibration of laboratory procedures for iodine and hormone assays by exchange of unknown samples of urine, blood and salt between the country and the visiting team, prior to the visit, is desirable.

Before visiting the country, the survey team should be informed as much as possible about the situation in the country, before and after the implementation of the IDD elimination programme.

The detailed steps and time schedule of the visit to the country should be decided well in advance and must have the concurrence of the national authorities.

The Visit: The visits should include, the MOH, the Ministries of Industry and Commerce, UNICEF, WHO, IDD Commission, Salt Commission, institutions and laboratories in charge of the chemical evaluation of IDD, academic bodies and senior officials of the salt companies. Press conferences can be organized and sponsored by MOH, both before the field survey in order to explain

the current status of the IDD elimination programme in the country, and after the survey to report the preliminary results. Information and education are essential in order to sensitize the population to the national IDD Elimination Programme. The health, medical and nutrition professional should be informed for continued involvement. The time devoted to these visits should not compromise with the time devoted to the field survey.

Field survey: The selection of the number and location of the sites is a delicate issue that consulting teams, especially the epidemiologist, have to consider carefully. The sites selected will depend critically on the geography and socio—economic structure of the country, as well as on the severity and possibly the heterogeneity of the problem of IDD. The techniques of sampling and the size of the samples are described in detail in the *'Indicators' booklet. The selection of the sites can be purely at random: it can also include places which were severely affected in the past or places which were never investigated.

The samples of population to be examined are usually groups of 40-100 school children between 6-12 years, in whom thyroid size and urinary iodine are determined.

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*From: 'Indicators for assessing Iodine Deficiency Disorders and their control through salt iodization'. Joint WHO/UNICEF/ICCIDD Report, WHO/NUT/94.6.

...NITY HEALTH CELL
...BRARY
AND
...UMENTATION
UNIT
...GALORE

Salt industry: The national salt industry needs to be critically evaluated. The evaluation should also study the role of institutions and individuals linked with the salt trade, the ministries of commerce, finance and industry, and public or private salt factories. In addition, sources of salt supply, iodization practices, packaging and pricing, adequacy of distribution system, transportation, quality control of iodine content in salt etc., should also be covered. The availability, and the consumption of iodized salt for domestic animals and for the food industry needs to be examined because of expected benefits from the use of iodized salt.

An evaluation of the salt industry would study the role of institutions and individuals linked to the salt trade, the concerned ministries, salt factories, salt supply sources, iodization practices, the salt distribution and transportation system, pricing and quality control of iodine content in salt.

The report

A preliminary report will be presented/ submitted to the national authorities, the national IDD Committee and the national and regional UNICEF and WHO offices before the visiting team leaves the country. This will help the authorities, who addressed the request, to appreciate and understand the time interval required before receiving the final report.

A final comprehensive report will be prepared as quickly as possible. It will summarize the background, the action developed by the country before the visit of the experts, and the detailed results of the assessment & analysis made, both in the field and in the laboratories, by the experts.

A final comprehensive report will be prepared as quickly as possible. It will summarize the background of the IDD problem, the status of the IDD elimination programme launched by the country before the visit of the experts, and give the detailed results of the assessment and analysis made, both in the field and in the laboratories, by the experts. It will also include a statement by ICCIDD on the progress made, with specific recommendations to the country for sustaining the elimination of IDD.

In addition, to the recommended criteria given in the "indicators" document, ICCIDD proposes the following statements:

I. The status of the management process so as to ensure sustainable elimination of IDD.

II. A country with universal neonatal screening using sufficiently sensitive TSH assay, may be declared free of iodine deficiency if fewer than 3% of the newborns have TSH levels more than 5 mU/l whole blood.

III. For countries where there is no universal neonatal screening, at least two of the following three criteria should be met:

1. All salt for human and animal consumption, in the regions where IDD is known or suspected, is iodized at a recommended level at the factory. This will ensure that representative salt samples obtained regularly from retail outlets, or preferably from homes, have iodine content sufficient to ensure a daily intake of 150 µg of iodine per person per day. [The actual requirement for the level of iodine in salt at the household level will vary, depending on the quality of salt, the prevailing climate conditions (warm moist, warm dry or cool moist, cool dry), packaging (bulk sack with polyethylene lining or retail pack), storing, and the daily consumption of salt].

In countries where there is no universal neonatal screening at least two of the three criteria should be met.

2. More than 50% of urine samples obtained on a regular basis in a statistically valid mode have an iodine content of 100µg/l or greater and more than 80% urine samples have an iodine content of 50µg/l or greater.

3. In regions where IDD is known or suspected, the prevalence of total goitre in representative surveys of children of school age (6-12 years old), is less than 5% as ascertained by competent observers, and preferably confirmed by ultrasonography, if available.

IV. In addition, to meeting two of the above three criteria, sustainability should be established according to the following guidelines, as applicable.

1. A national IDD programme has been set up; it is responsible for continuous monitoring of the status

of iodine deficiency and of iodine content of salt, according to established criteria. The responsibility also includes mandatory public reporting of IDD status at regular specified intervals (e.g every three to five years), by designated units (e.g the programme, the Ministry of Health), that are technically competent and adequately financed.

2. The government, private sector and consumers have a high awareness of iodine deficiency and are committed to its sustained elimination.

3. The salt industry has the commitment, technical resources, and responsibility (frequently mandated by legislation), to sustain effective iodization of salt, including its production, distribution and monitoring.

4. The supply of iodine for salt iodization is ensured either through private purchase by the salt manufacturers or through the government.

5. The availability, perceived health benefits of iodized salt, despite its marginally higher cost, makes consumers buy iodized salt rather than the non-iodized product.

6. The IDD programme has ready access to local and regional facilities to measure iodine levels in salt and to a central laboratory, competent to measure iodine in urine or neonatal blood TSH, or both, at affordable rates.

The report and recommendations prepared by the visiting team will be reviewed by the ICCIDD Advisory Committee on "Sustaining Elimination of IDD". A final assessment with recommendations will be addressed to the country and appropriate collaborating organizations.

The report and recommendations prepared by the visiting team will be reviewed by the ICCIDD Advisory Committee on "Sustaining Elimination of IDD". A final assessment with recommendations will be addressed to the country and appropriate collaborating organizations.

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Annexure - 1: Resolution of 1996 World Health Assembly 'Prevention and control of iodine deficiency disorders' (WHA49.13)

世界衛生大會 決議 قرار لجمعية الصحة العالمية

RESOLUTION OF THE WORLD HEALTH ASSEMBLY

RESOLUTION DE L'ASSEMBLÉE MONDIALE DE LA SANTE

РЕЗОЛЮЦИЯ ВСЕМИРНОЙ АССАМБЛЕИ ЗДРАВООХРАНЕНИЯ

RESOLUCION DE LA ASAMBLEA MUNDIAL DE LA SALUD

FORTY - NINTH WORLD HEALTH ASSEMBLY — WHA49.13

Agenda item 17 — 25 May 1996

Prevention and control of iodine deficiency disorders

The Forty-ninth World Health Assembly,

Having considered the report of the Director-General regarding the progress achieved in preventing and controlling iodine deficiency disorders;[1]

Recalling resolutions WHA39.31 and WHA43.2 on the prevention and control of iodine deficiency disorders,

1. COMMENDS governments, international organizations, bilateral agencies, and nongovernmental organizations, in particular the International Council for Control of Iodine Deficiency Disorders:

(1) on their efforts to prevent and control iodine deficiency disorders and to support related national, regional and global initiatives;

(2) on the progress achieved since 1990, through joint activities in many countries, towards the elimination of iodine deficiency disorders as a major public health problem throughout the world;

2. REAFFIRMS the goal of eliminating iodine deficiency disorders as a major public health problem in all countries by the year 2000;

3. URGES Member States :

(1) to give high priority to the prevention and control of iodine deficiency disorders wherever they exist through appropriate nutritional programmes as part of primary health care;

(2) to increase efforts for the sustainability of the elimination of iodine deficiency disorders by continued monitoring, training and technical support, including advice on appropriate health legislation, and social communication in cooperation with the International Council for Control of Iodine Deficiency Disorders, other nongovernmental organizations and UNICEF, as required;

[1] Document A49/4, part VII

4. REQUESTS the Director-General:

(1) to continue to monitor the incidence and prevalence of iodine deficiency disorders;

(2) to reinforce the technical support provided to Member States, on request, for monitoring progress towards the elimination of iodine deficiency disorders with the help of the International Council for Control of Iodine Deficiency Disorders, other nongovernmental organizations and UNICEF, as required;

(3) to mobilize additional technical and financial resources to permit those Member States in which iodine deficiency disorders are still a significant problem, for training health and development workers in the early identification and treatment of iodine deficiency disorders and develop or expand their appropriate public health preventive programmes for the elimination of these disorders;

(4) to establish a mechanism for verifying the elimination of iodine deficiency disorders in the world;

(5) to report to the Health Assembly by 1999 on progress achieved in the elimination of iodine deficiency disorders.

Sixth plenary meeting, 25 May 1996
A49/VR/6

Annexure - 2: ICCIDD Office Bearers

(as of January, 1996)

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A detailed introduction to ICCIDD is published in 'Introduction to International Council for Control of Iodine Deficiency Disorders (ICCIDD).

Introduction to

INTERNATIONAL COUNCIL FOR CONTROL OF IODINE DEFICIENCY DISORDERS

(ICCIDD)

Sustaining Elimination of IDD

ICCIDD

International Council
for Control of
Iodine Deficiency Disorders

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